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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/682,044

10/08/2003

Lee A. Bulla JR.

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09/19/2006

MORRISON & FOERSTER LLP
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EXAMINER

HANLEY, SUSAN MARIE

ART UNIT

PAPER NUMBER

1651

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/682,044

Applicant(s)

BULLA ET AL.

Examiner

Susan Hanley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-25 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 17-25 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Susan Hanley is now the examiner for this application.

The amendment and remarks filed 6/23/06 are acknowledged.

Claims 17-25 remain under examination.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 101

Claims 17-25 stand rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Applicant argues that the amendment to the claims clarifies that the subject matter is explicitly contemplated by the statute. Applicants asserts that they are not aware of any authority which states that claimed compositions of matter need to be detachable from the earth and that the office has cited no authority for its position with regard to the claims prior to the amendment.

Applicant's arguments filed 6/23/06 have been fully considered but they are not persuasive. Responding to Applicants' assertion that the amendment to claim 17 ("a composition of matter") clarifies the claim as being statutory subject matter, the MPEP 2105 relates the Supreme Court points in the Chakrabarty opinion (points 5 and 6 are recited as the most pertinent in response to Applicants' argument):

5. "Thus, a new mineral discovered in the earth or a new plant found in the wild is not patentable subject matter. Likewise, Einstein could not patent his celebrated law that $E=mc^2$; nor could Newton have patented the law of gravity."

6. "His claim is not to a hitherto unknown natural phenomenon, but to a nonnaturally occurring manufacture or composition of matter -- a product of human ingenuity having a distinctive name, character [and] use."

The use of the term "a composition of matter" does not clarify the claim as statutory subject matter. In point 6, the Supreme Court states that a composition of matter can be nonnatural (i.e.

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statutory). By deduction, the Supreme Court implies that a composition of matter can be natural (i.e. non-statutory). Hence, the amended claims do not automatically qualify as statutory subject matter because the encompasses a natural composition of matter: a rock formation which has been treated according to the claims of parent case 09/696,797 (now U.S. Pat. 6,691,783). A rock formation, even when treated by a novel and non-obvious process, is not patentable subject matter. Furthermore, the claims include an embodiment for a rock formation that is produced by non-isolated bacteria under natural conditions. The specification discloses that the microorganism responsible for the treatment is isolated from soil. Hence, the microorganism can carry out the process under naturally occurring conditions to produce a treated rock formation that falls within the scope of the claims. This embodiment is "wild" or naturally occurring and therefore, nonstatutory.

Claim Rejections - 35 USC § 112

Claims 17-25 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants argue that the metes and bounds of the composition of matter extend to the limits of the presence of the biofilm described in claim 17. Applicant asserts that when the biofilm is present, the composition is included within the scope of the invention.

Applicant's arguments filed 6/23/06 have been fully considered but they are not persuasive. Responding to Applicants' assertion that the presence of a biofilm defines the metes and bounds of the invention, the description of one part of a whole does not define or limit the rest of the whole.

The Office disputes the term "geotextile" as it interprets a "permeable stratum" to be a rock formation. Applicant argues that the interpretation of permeable stratum is inaccurate; a permeable stratum

Applicants argue that the term "geotextile" is not a rock formation and that claim 21 has been clarified wherein the plugged stratum includes a geotextile. Responding to Applicants' argument, it is

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unclear how something that "is a geotextile" can be transformed to "including a geotextile". This further confuses the metes and bounds of the term "geotextile". Further, Applicants have not clarified why a rock formation is a geotextile. "Textile" implies the an item is made-made while rock formations are naturally occurring.

Terminal Disclaimer

The terminal disclaimer filed on 6/23/06 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,691,783 has been reviewed and is accepted. The terminal disclaimer has been recorded.

No claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

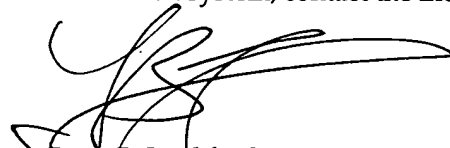
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Hanley whose telephone number is 571-272-2508. The examiner can normally be reached on M-F 9:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Hanley
Patent Examiner
1651



Leon B. Lankford, Jr.
Primary Examiner
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